SECRET

1 August 1962

MEMORANDUM FOR: DC/Development Branch/DPD

SUBJECT : Progress Report on [redacted] for Week of 23 August. 25X1

1. The following information is based on a phone conversation with [redacted] 25X1

2. Little work was done on the correlator during the last week, because a complete set of the new cylinders has not been received yet. Some flight test data film was run through the correlator, but little was gained from it. One cylinder lens has been received from Perkin-Elmer, and the second one is expected in about 3 weeks. [redacted] 25X1
25X1 [redacted] is not expected to deliver any cylinders for at least 4 weeks.
25X1 [redacted] should produce somewhat better cylinders than Perkin-Elmer, according to [redacted] is using test 25X1
glasses, while P. E. is not.

3. Work on the recorder concentrated on the lens system recorder. This was being tested and run using a bench power supply, since no flyable power supplies are operational at the moment. Test are being made using a 1 mil spot size CRT and both Plus-X pan and Tri-X films. Limiting resolution in both cases seems to be about 500-600 lines/inch. (it varies over the field), which compares with a maximum of 450 lines/inch for the fiber optics. The acuity of the lens system, particularly when using Plus-X, is also superior to that of the fiber optics. Streakiness on the film is much reduced. Exposure on Plus-X is adequate when lens is set at f/4.0. Since maximum setting of lens is f/2.0 (both these are the marked f/nos., not the operating f/nos.), there is adequate exposure margin of safety.

4. Literature received concerning the Ferranti tube indicates that it is worth looking into for second generation equipment, because of the resolution (.4 mil spot size) and shape of tube. The tube has a rectangular output end, with a 1" x 5" phosphor area. If the rest of the tube conforms to this shape, it should permit more compact mounting.
25X1 Both [redacted] are looking further into this.

[redacted] 25X1
Chief
TSD/Applied Physics Branch

25X1 [redacted]

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